

IAEA 50-SG-O7, Maintenance of Nuclear Power Plants

Revision: Change 1, January 1990

Sponsoring Organization: International Atomic Energy Agency

RPP-WTP Specific Tailoring

The following tailoring of IAEA 50-SG-O7 is required for use by BNFL as an implementing standard for maintenance.

General: Replace “nuclear power plant” with “facility” throughout the standard.

Justification: The RPP-WTP facility is not a nuclear power plant. However the principles for Maintenance outlined in the standard are applicable to the RPP-WTP facility.

Definitions

Commencement of Operation: revise the definition to read “the beginning of radioactive operations.”

Justification: The original definition, the beginning of initial fuel loading, has no application to the RPP-WTP. The commencement of operations being the beginning of radioactive operations recognizes that there may be non-radioactive testing performed prior to the operations authorization.

Operations: Delete the word “refueling” from the definitions

Justification: Refueling operations do not apply to the RPP-WTP facility.

Safety Systems: Delete “to assure the safe shutdown of the reactor or the residual heat removal from the core or” from the definition.

Justification: The RPP-WTP facility does not have a reactor or require residual heat removal from a core.

Section 101: Delete the paragraph.

Justification: The paragraph explains the background for development of IAEA 50-SG-O7. This new standard is a tailored version of IAEA 50-SG-O7 and the paragraph is no longer applicable.

Section 108: The IAEA standards will be used as guidance for in-service inspections and surveillances.

Justification: As noted in IAEA 50-SG-07, the IAEA standards are to be consulted to avoid gaps in the overall maintenance program.

Section 208: Delete “(see Safety Guide on Commissioning ... No.50-SG-O4)”

Justification: Commissioning activities at RPP-WTP will be carried out in accordance with the safety criteria in Section 6.0 of the SRD.

Section 210: Delete the words “guidance on identification of structures, systems and components is provided in safety Guide on Safety Functions and Component Classification for BWR, PWR, and PTR, IAEA Safety Series No. 50-SG-D1.”

Justification: Classification of SSCs is performed in accordance with Appendix A of the SRD.

Section 211: Delete the last sentence of the section.

Justification: SSCs that are important to safety are defined in accordance with Appendix A of the SRD.

Section 212: Delete subsection (a).

Justification: Safety Guide 50- SG-D1 deals with safety functions and component classification of nuclear power plants and does not apply to RPP-WTP.

Section 220: Delete “- the type of reactor” and “- the mode of refueling”

Justification: The RPP-WTP is not a reactor nor will it be refueled.

Sections 221 and 222: Delete the sections in their entirety.

Justification: Refueling activities are not applicable to the RPP-WTP facility.

Section 223: Delete reference to refueling activities.

Justification: Refueling activities are not applicable to the RPP-WTP facility.

Section 303: Delete “the number of reactors on one site” and “mode of operation of the reactors” from the fifth sentence.

Justification: The RPP-WTP is not a power plant with reactors.

Section 306: Replace the first sentence of the section with ,“Staffing for the maintenance group, including selection, shall consider the guidance of Safety Guide 50-SG-01. Training and

qualification shall be in accordance with section 7.2 of the Safety Requirements Document.”

Justification: Safety Guide No. 50-SG-O1 shall be treated as providing guidance only. Training of personnel shall be as governed in section 7.2 of the SRD.

Section 309: Delete “Detailed guidance for training of personnel ... IAEA safety Series No. 50-SG-O5.”

Justification: Radiation worker training is a portion of the RPP-WTP radiation protection program. The radiation protection program is governed by safety criterion 5.0-1.

Section 401: Revise the last sentence to read “The development, review, and approval of administrative procedures shall be in accordance with section 7.2, Training and Procedures, of the SRD”

Justification: Training and procedures are governed by SRD section 7.2.

Section 404(6): Revise the section to delete “mentioned in Safety Guide 50-SG-O5 shall be complied with” and replace with “shall be in accordance with safety criterion 5.0-1 of the Safety Requirements Document”.

Justification: The radiation protection program for WTP-RPP is established in accordance with the referenced safety criterion and is the controlling document for work in radiologically controlled areas within the RPP-WTP

Section 404: Revise the last paragraph of the section as follows: “Reference should be made to the Safety Guide on Management of Nuclear Power Plants for Safe Operations, IAEA Safety Series No. 50-SG-09, for further guidance of interface between maintenance and operations.”

Justification: IAEA. 50-SG-09 will be used for guidance but has not been accepted for use on the RPP-WTP for management of the facility.

Section 405: Revise the last sentence to read “The preparation of maintenance instructions shall be in accordance with the safety criterion 7.3-5 of the Safety Requirements Document.”

Justification: Preparation of procedures will be in accordance with RPP-WTP QA requirements contained in the referenced safety criterion.

Section 406: Delete the following words “(see the Safety Guide on the General ... No. 50-SD-D11)”

Justification: General design safety principles for nuclear power plants do not apply to RPP-WTP.

Section 411: Revise the first sentence to read “The content and format for a typical maintenance instruction should include the following.”

Justification: 50-SG-QA5 does not apply to RPP-WTP

Section 702: Revise the first sentence to read “Modifications shall be planned and conducted in with accordance safety criteria 4.0-1 and 4.0-2 of the Safety Requirements Document.”

Justification: Configuration management of the RPP-WTP is governed by the two referenced safety criteria.

Section 703: Delete “primary coolant boundary” and “reactor protection equipment” from the parenthetic example of important to safety systems.

Justification: There are reactor specific examples.

Section 709: Revise the first sentence to read “The proposed modification shall conform to the provisions set forth in the safety analysis report.”

Justification: The Safety Code is equivalent to the safety analysis report and the Safety Guides on Design are not applicable to the WTP-RPP.

Section 804: Revise the first sentence as follows “The operating organization should arrange to purchase appropriate quantities of spare plant items and components for systems important to safety.”

Justification: The timing of spare parts procurement is to be established apart from the maintenance standard.

Section 806: Revise the first sentence as follows “Procurement of plant spares, materials parts and components shall be in accordance with the provisions of safety criterion 7.3-11 of the WTP-RPP Safety Requirements Document.

Justification: The QA requirements for procurement for the WTP-RPP are contained in the referenced safety criteria.

Section 807: Revise the sentence to read “It should be the responsibility of the purchasing unit to ensure that materials and items are obtained only from suppliers who are approved in accordance with the requirements of safety criterion 7.3-11 of the WTP-RPP Safety Requirements Document.”

Justification: The QA requirements for procurement for the WTP-RPP are contained in the referenced safety criteria.

Section 811: Delete the last sentence

Justification: QA for the project is governed by the project quality assurance program.

Section 1002 and 1006: Delete reference to Safety Guide on Quality Assurance Records Systems for Nuclear Power Plants, IAEA Safety Series No. 50-SG-QA2 and replace with the section 7.3 of the RPP-WTP Safety Requirements Document

Justification: QA requirements for the RPP-WTP are as stated in section 7.3 of the SRD.

Section 1101: Delete the last sentence.

Justification: QA for the project is governed by the project quality assurance program.

Section 1108: Revise the second sentence as follows, “Audit details shall be in accordance with safety criterion 7.3-10 of the WTP-RPP Safety Requirements Document.”

Justification: QA requirements for audits are as stated in safety criterion 7.3-10 of the SRD.

Annex, Section A.3: Revise the section to read “This annex does not relate to controls required to avoid incorrect maintenance of the plant item. These are covered in paras 405 – 413 (maintenance instructions), which should be considered together with associated quality assurance requirements detailed in section 7.3 of the Safety Requirements Document.”

Justification: QA requirements for the RPP-WTP are as stated in section 7.3 of the SRD.